

REMARKS

I. Introduction

Pending claims 1-6, 13, 15-18, 26 and 31 have been examined and are rejected.

Specifically, claims 1-6, 15, 26 and 31 are rejected under 35 U.S.C. § 112, first paragraph; claims 13 and 18 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Orbons et al., EP 0727375 (hereinafter “Orbons”); claim 16 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by newly applied Takumi, JP 63-154558 (hereinafter “Takumi”); and claims 13 and 17 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over McCulley, U.S. Patent No. 938,885 (hereinafter “McCulley”) in view of Smedal, U.S. Patent No. 1,128,730 (hereinafter “Smedal”).

By way of overview, Applicant overcomes the § 112, first paragraph, rejection of claims 1-6, 15, 26 and 31, and traverses the art rejections of claims 13 and 16-18, as follows.

II. Requirement For Information Under 37 C.F.R. § 1.105

As an initial matter, in response to the Examiner’s Requirement for Information Under 37 C.F.R. § 1.105, Applicant submits concurrently with this Amendment, a copy of each of the following six references:

1. Japanese Patent Publication No. 5-238072A (corresponding to U.S. Patent No. 5,448,397);
2. Japanese Patent Publication No. 5-278292A (corresponding to U.S. Patent No. 5,195,836);

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3. Japanese Patent Publication No. 5-294528A (corresponding to U.S. Patent No. 5,363,129);

4. Japanese Patent Publication No. 8-2183A (corresponding to U.S. Patent No. 5,342,133);

5. Japanese Patent Publication No. 9-263015A (with English-language Abstract); and

6. A Catalog (3 pages) for a Large Printer, model no. IP-4000, sold prior to 1998. The second page of the catalog shows a paper feeding section (left photo). The third page shows the dimensions of the large printer. As is apparent from the rightmost photo on the third page, the height of the paper feeding section is approximately 100 cm from the ground. As noted on the third page, the catalog was published in June 1997.

III. Claim Rejections -- 35 U.S.C. § 112, First Paragraph

Claims 1-6, 15, 26, and 31 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner alleges that the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claims 1, 15, and 26 recite, *inter alia*, that the paper feeding unit is operable to feed one roll of paper, one substantially flat sheet of paper, and one stiff carton. The Examiner alleges that the specification as filed does not describe a device that is operable to feed three distinct items as now recited in claims 1 and 15. Applicant respectfully disagrees.

Applicant's specification clearly describes an apparatus that is operable to feed three distinct items, *i.e.*, a roll of paper, a substantially flat sheet of paper and a stiff carton. For example, Applicant's specification notes that the present invention relates to a large printer that employs roll paper and that can print a large sheet of paper (*see* Applicant's specification: page 1, lines 5-7). Furthermore, Applicant's specification describes a large printer that can print large sheets of stiff carton (*see* Applicant's specification: page 2, line 23 to page 3, line 1).

As noted in Applicant's specification, the large printer may include a feeding unit in which roll paper is loaded (*see* Applicant's specification: page 3, lines 16-18). Additionally, in a similar manner, a sheet of paper, such as a stiff carton, can be loaded via the feeding unit (*see* Applicant's specification: page 3, lines 20-21). Thus, as clearly set forth herein, a stiff carton is characterized as an example of a sheet of paper. Indeed, in an exemplary embodiment, the paper feeding unit 30 of the large printer can accept, as a printing medium, a paper roll, a sheet of paper (*e.g.*, having a thickness of less than 0.5 mm) and a stiff carton (*e.g.*, having a thickness of 0.5 mm to 1.5 mm) (*see* Applicant's specification: page 9, line 20 to page 10, line 1; Fig. 3; and claim 31).

In view of the above, Applicant's specification contains a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and sets forth the best mode contemplated by the inventor of carrying out his invention, as required by 35 U.S.C. § 112, first paragraph.

IV. Claim Rejections -- 35 U.S.C. § 102(b)

Claims 13 and 18

Claims 13 and 18 stand rejected under § 102(b) as allegedly being anticipated by Orbons.

The Examiner alleges that claims 13 and 18 are anticipated by Orbons because "Orbons discloses a sheet feeding area with a plurality of rolls arranged obliquely to each other" (*see* Office Action: page 4). To the contrary, the Examiner's allegation is flawed because claims 13 and 18 do not recite any oblique arrangement of rolls in a sheet feeding area.

Furthermore, Applicant traverses the Examiner's allegation that claims 13 and 18 are anticipated by Orbons as follows.

Claim 13 recites, *inter alia*, "a sheet feeding area positioned at a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level". Orbons fails to disclose or suggest these features of claim 13.

Instead, Orbons makes a clear distinction between its processing unit 1 and its feed unit 2 (Orbons: Fig. 1). Indeed, Orbons expressly describes the feed unit 2 housing rolls of receiving material 16, 17, 18, 19 placed in drawers 14, 15 (Orbons: Abstract). In Orbons, a channel 35, 36, 37, 48, 49 is formed at a working height for a standing operator (Orbons: Abstract; and Fig. 1). This channel allows the standing user to place a roll of receiving material 16, 17, 18, 19 having a hollow core 30 in the channel so that a spindle 31 can be introduced into the roll core 30 (Orbons: Abstract). The feed unit 2 of Orbons is located below this channel and thus is below a working height for a standing operator (Orbons: Fig. 1).

Thus, the act of setting up the spindle and loading rolls 16 and 17 disclosed in Orbons fails to anticipate the "sheet feeding area" of claim 13. Indeed, a standing operator in Orbons would necessarily have to bend substantially, *i.e.*, non-negligibly, at the waist in order to load the rolls of receiving material 16, 17 into drawer 14 of the feed unit 2 (Orbons: Fig. 1). Orbons expressly discloses that the user must bend in order to introduce the rolls 16, 17 into the drawer 14 (Orbons: col. 5, lines 2-7; Fig. 1).

Like claim 13, claim 18 recites "a sheet feeding area positioned at a height at which a user standing in front of the printer can set up a printing medium without having to bend substantially at the waist, wherein the sheet feeding area is positioned at the height when the printer is placed substantially at ground level". Thus, claim 18 is not anticipated by Orbons based on a rationale analogous to that set forth above for claim 13.

Additionally, claim 18 also recites, *inter alia*, "a paper feeding path which extends straight in a vertical direction from the paper feeding area to the paper discharge area via the printing area". Orbons fails to disclose or suggest these features of claim 18.

Paths 22, 23 and 9 of Orbons appear to be vertical, but that these paths do not correspond to the recited paper feeding path of claim 18. For example, element 9 of Orbons is a heating device and not a path (Orbons: col. 2, lines 37-39). With respect to the paths formed by the common conveyors 22 and 23 of Orbons, these paths feed the receiving material from the feed unit 2 to the processing unit 1 (Orbons: col. 3, lines 1-2). However, neither common conveyor 22 nor 23 discloses or suggests a path extending straight in a vertical direction from the feed unit 2 of Orbons to a discharge area of Orbons. Instead, Orbons describes a separate discharge path

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10, which is not straight in a vertical direction and thus does not correspond to the recited paper feeding path (Orbons: col. 2, lines 39-40; and Fig. 1).

For at least the above exemplary reasons, claims 13 and 18 are not anticipated by Orbons.

Claim 16

Claim 16 stands rejected under § 102(b) as allegedly being anticipated by Takumi.

The Examiner alleges that claim 16 is anticipated by Takumi because Takumi discloses a sheet feeding area with an elongative member and a pair of supports pivotable toward the front of the printer (*see* Office Action: page 4). Applicant disagrees.

For example, claim 16 recites, *inter alia*, “a sheet feeding area positioned at a height at which a user standing in front of the printer can set up a printing medium without having to bend substantially at the waist, wherein the sheet feeding area is positioned at the height when the printer is placed substantially at ground level”.

Takumi fails to disclose or even suggest any positioning of a sheet feeding area at a height relative to a user. Consequently, claim 16 is not anticipated by Takumi.

V. Claim Rejections -- 35 U.S.C. § 103(a)

The Examiner continues to reject claims 13 and 17 under § 103(a) as allegedly being unpatentable over McCulley in view of Smedal.

Because claims 13 and 17 are patentable over McCulley and Smedal for at least the exemplary reasons set forth in Applicant's previously filed remarks (*see, e.g.*, Applicant's Amendment of November 19, 2003), the Examiner is requested to reconsider his position for at least the following exemplary reasons.

As an initial matter, McCulley and Smedal represent non-analogous art in that they both relate to typewriters, which are not large printers, as recited in claims 13 and 17. Typewriters do not generally suffer from the problems encountered by large printers. For example, typewriters would not require a deeper installation space for replacing a paper roll or require that a user replace a heavy roll of paper (*see, e.g.*, Applicant's specification: page 1, line 1 to page 2, line 19). Indeed, Applicant's specification clearly describes the aforementioned exemplary problems encountered by large printers (*see, e.g.*, Applicant's Specification: page 1, lines 5-7; page 1, lines 8-12; page 1, line 25 to page 2, line 5; page 2, lines 12-19; page 2, line 23 to page 3, line 5; and Figs. 1 and 4).

Applicant notes that a reasonable interpretation of the claims must be consistent with the interpretation that those skilled in the art would reach (MPEP § 2111). The title of Applicant's invention is *Large Printer*. Furthermore, all of the pending claims are directed to large printers (*see, e.g.*, Applicant's claims 13 and 17). Typewriters are not large printers. Consequently, because McCulley and/or Smedal represent non-analogous art, the rejection of claims 13 and 17 under § 103(a) is improper.

Furthermore, the Examiner acknowledges that McCulley fails to teach or suggest "a sheet feeding area positioned at a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level", as recited in claim 13 (*see* Office Action: page 5). However, the Examiner alleges that Smedal makes up for the acknowledged deficiencies of McCulley by disclosing a roll attachment for type writers that

includes a frame (5) with a vertical leg (3) adapted to be supported at any elevation (*citing* Smedal: page 1, lines 85-90), including a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level, when the printer is placed substantially at ground level, for the purpose of adapting the attachment to any type writing machine (see page 1, lines 15-30).

Applicant respectfully submits that the Examiner is mischaracterizing Smedal. For example, Smedal does not disclose a frame (5) with a vertical leg (3) adapted to be supported at any elevation. Instead, Smedal discloses that a frame 5 with a vertical leg 3 adapted to be supported at any desired elevation within the post 2 (*see* Smedal: page 1, lines 86-89; and Fig. 5). Smedal does not disclose or even suggest that an elevation of the vertical leg 3 within the post 2 would position a sheet feeding area of the attachment at a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the typewriter and standing substantially at ground level. For at least these exemplary reasons, the Examiner's proposed combination of McCulley and Smedal would not render the subject matter of claim 13 obvious. Consequently, claim 17 is patentable over McCulley and Smedal as well, at least by virtue of its dependency.

VI. Formal Matters -- Information Disclosure Statements

The Examiner provides signed and initialed copies of the Forms PTO/SB/08 submitted with the IDSes filed on October 15, 2003; November 4, 2003; and February 3, 2004, thereby indicating consideration of the references cited therein.

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VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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